

In the claims:

1.(currently amended) A rope comprising: weakened polymeric fibers throughout the length of the rope, wherein the rope has a uniform diameter of between about 5/16 inch and 1.0 inch and breaks between 600 and 2200 pounds of at a pulling tension being of at least 25 % less than that of the same a rope of the same diameter of un-weakened same polymeric fibers, said weakened polymeric fibers including filler particles uniformly encapsulated therein.

2.(currently amended) The rope according to claim 1, wherein the rope comprises fibers comprising 30-90 wt % of a-thermoplastic polymer and a 20-70 wt % said filler distributed uniformly in said polymer, said filler having an average particle size under 100 microns, and wherein said thermoplastic polymer is a blend of polypropylene (PP) and polyethylene (PE) wherein said polymeric fibers have been extruded, and wherein PP serves as the continuous phase and PE serves as the discontinuous phase.

3.(currently amended) The rope according to claim 4 2, wherein ~~the rope breaks between 600 and 1250 pounds of pulling tension~~ said thermoplastic polymer is a blend of 90-60 wt. % of PP and 10-40 wt. % of PE.

4.(currently amended) The rope according to claim 2 3, wherein ~~the fibers are prepared with sufficient filler to decrease the tensile strength of the thermoplastic polymer by at least about 25% compared with a thermoplastic polymer without said filler~~ said PP and PE have melt flow rate values (MFR) at 230°C/2.16kg which differ by a value of at least 5g/10min.

5.(currently amended) The rope according to claim 2 1 wherein said particulate filler is at least one selected from the group consisting of starch, sand, barium sulfate, barite, bathes, iron oxide and sodium chloride.

6.(currently amended) The rope according to claim 2 1, wherein said thermoplastic polymer is at least one selected from the group consisting of polyamide, polypropylene, polyethylene, polyolefin, and copolymers thereof.

7 (cancelled)

8.(currently amended) The rope according to claim 1, wherein said weakened fibers are formed of a blend of at least two thermoplastic polymers having limited compatibility including polyethylene (PE) having a melt flow rate (MFR) > 50g/10 min and polypropylene (PP) having a MFR <15g/10min.

9.(currently amended) The rope according to claim 8 2, wherein the at least two thermoplastic polymers have melt flow index values rate (MFR) of said PP and PE which differ by a value of at least 5g/10 mm.

10.(currently amended) The rope according to claim 9 wherein the blend consists of 90-60 70-85 wt % polypropylene (PP) and 10-40 30-15 wt % polyethylene wherein the wt % is based on the total weight of the weak fiber.

11.(currently amended) The rope according to claim 9 1, wherein said filler particles comprise 20-70 % by volume of the filler encapsulated polymeric fibers the at least two thermoplastic polymers have melt flow index values which differ by 20-50g/ 10 min.

12.(currently amended) The rope according to claim 8 1, wherein said polymeric fibers include the at least two thermoplastic polymers are polyethylene having a molecular weight distribution >4 in a concentration of 85-95 wt % and amorphous polypropylene in a concentration of 5-15 wt %, wherein the wt % values are based on the total weight of the weak fibers a blend of polypropylene (PP) having a melt flow rate (MFR) of 3-80 and polyethylene (PE1), being a low density polyethylene (LDPE) with a MFR of 30-250 and a molecular weight distribution (MWD) of 4.3-5.5 and wherein said filler is barium sulfate.

13.(cancelled previously)

14.(cancelled previously)

15.(cancelled previously)

16.(cancelled previously)

17.(cancelled previously)

18.(currently amended) A sea worthy rope comprising:

braided fibers of thermo plastic material throughout the length of said rope; and  
a quantity of inorganic material filler dispersed evenly throughout the thermo plastic material in a portion of said rope extending from one end one, wherein said dispersed filler thermoplastic material occupies about 10-30 % of the length of said rope and wherein the transition from said dispersed filler thermo plastic material to said thermo plastic material without said filler is a continuous transistion, wherein the tensile strength of the braided fibers in the dispersed filler portion of the rope is decreased by more than about 50 25% compared to the tensile strength of the rope portion without said dispersed filler.

19.(currently amended) The rope of claim 18, wherein said thermo plastic material is a mix blend of polypropylene (PP) and polyethylene (PE) where the polypropylene includes a portion of amorphous polypropylene and wherein said rope has a uniform diameter throughout.

20.(currently amended) The rope of claim 19, wherein the polypropylene and polyethylene polymers have a melt flow rate (MFR) values which differ by a value of at least 20 g/ 10 min.

21.(previously presented) The rope of claim 19, wherein the blend is about 75 wt% polypropylene and about 25 wt% polyethylene.

22.(cancelled)

23.(previously presented) The rope of claim 19, wherein said polypropylene has a melt flow rate of less than 15g/ 10 min and said polyethylene has a melt flow rate of greater than 50g/ 10 min and the molecular weight distribution (MWD) of said polypropylene and said polyethylene is greater than 4.

24.(cancelled)

25.(currently amended) The rope of claim ~~48~~ 19, wherein said ~~PP-PE blend has been mixed, heated and formed in and extruder and wherein said~~ braided fibers having said inorganic material dispersed ~~filler~~ throughout have been drawn at a ratio of greater than 6.3:1 ~~—and wherein said decrease in tensile strength of said braided fibers is in relation to rope of equivalent size and thermo plastic materials without said inorganic material dispersion.~~

26.(previously presented) A braided seaworthy rope, comprising:

braided fibers of thermoplastic material monofilament throughout the length of said rope;

and

a quantity of inorganic particles dispersed evenly throughout said thermoplastic monofilament;

wherein said thermoplastic material a mix of polypropylene (PP) having a MFR<15g/10 min. and polyethylene (PE) having a MFR>50g/ 10 min;

wherein said rope has a uniform diameter throughout its length;

wherein the tensile breaking strength of said rope is at least 25% less than an equal rope without said inorganic particle dispersion; and

wherein said rope elongation is less than 20%.

27.(new) A rope of uniform diameter throughout its length, comprising:

a plurality of thermoplastic polymeric fibers throughout said rope length;

at least a portion of the length of said rope being wherein said thermoplastic; said fibers ~~containing~~ contain a uniform dispersion of inorganic particulate in said polymer, said inorganic particulate dispersion polymeric fibers having been melt drawn as monofilament;

wherein said thermoplastic fibers contain polypropylene (PP) is a mix of about 15 wt% polyethylene, about 70 wt% non-amorphous polypropylene, and about 15 wt% amorphous polypropylene with a melt flow rate (MFR) of about 12; and

wherein the molecular weight distribution (MWD) of said polypropylene and said polyethylene is greater than 3 said inorganic particulate is barium sulfate.